

# Saluda River Basin Council

Meeting #22

February 19, 2025

## February 19, 2025 Meeting Agenda

### Meeting Objectives:

- 1) Develop Progress Metrics
- 2) Review and discuss RBC comments and edits to the draft River Basin Plan
- 3) Review the draft Executive Summary
- 4) Begin to plan for the public meeting

1. Call the Meeting to Order (K.C. Price, Chair) 10:00–10:10
  - a. Review of Meeting Objectives
  - b. Approval of Agenda
  - c. Approval of January 15<sup>th</sup> Minutes and Summary
  - d. Announcements and WaterSC Update
2. Public<sup>1</sup> and Agency Comment (Kirk Westphal) 10:10–10:15
3. Development of Progress Metrics (Kirk Westphal) 10:15–11:15
- Break* 11:15–11:25
4. Review of RBC Comments and Edits to the Draft River Basin Plan (Kirk Westphal) 11:25–1:00
- Break for Lunch* 12:00–12:25
5. Review of the Draft Executive Summary (Kirk Westphal) 1:00–1:20
6. Public Meeting Discussion (Kirk Westphal) 1:20–1:35
7. Upcoming Schedule (Kirk Westphal) 1:35–1:45

## Quorum Determination

## Review Meeting Objectives

1. Develop Progress Metrics
2. Review and discuss RBC comments and edits to the draft River Basin Plan
3. Review the draft Executive Summary
4. Begin to plan for the public meeting

## Approval of Agenda

## Approval of January 15<sup>th</sup> Meeting Minutes and Summary

## News and Announcements

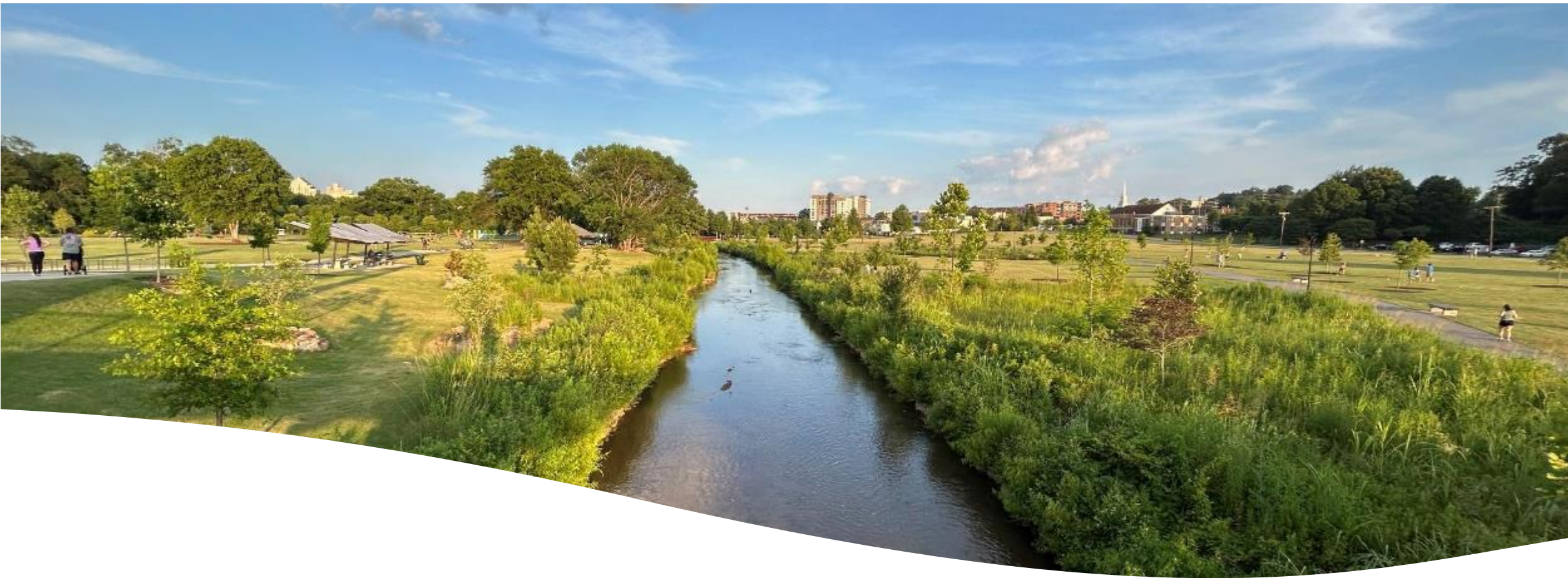
# Saluda River Basin Council

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# Public and Agency Comment



# Development of Progress Metrics

# Progress Metrics

To assess the performance of and quality of actions taken by the RBC, the Framework proposes the development of progress metrics. A progress metric is a **“benchmark used to monitor the success or failure of an action taken by an RBC”**.

# Implementation Plan – Prioritized Objectives

Objective	Prioritization*	Prioritization Justification
<b>Objective 1. Improve water use efficiency to conserve water resources</b>	4	The efficient use of water helps to maintain adequate streamflow for instream uses and should be implemented even if water shortages are not an immediate concern.
<b>Objective 2. Communicate, coordinate, and promote findings and recommendations from the River Basin Plan</b>	1	Communication is essential to promoting RBC recommendations and ensuring implementation objectives are pursued by stakeholders. Communication should be on-going.
<b>Objective 3. Improve technical understanding of water resource management issues</b>	3	Additional technical information is necessary to inform and continually update the RBC's understanding of basin issues and best practices to manage concerns.
<b>Objective 4. Protect water resources</b>	5	Protection of water resources from sedimentation and hydrologic impairment are on-going objectives to be sustained while pursuing higher priority objectives.
<b>Objective 5. Improve drought management</b>	6	Maintaining up-to-date drought plans is critical for public water supplier response and to coordinate actions at a basin- and state-level.
<b>Objective 6. Promote engagement in water planning process</b>	2	Engagement is essential for stakeholder buy-in on recommendations and continued support for river basin planning.

\* 1 is the highest priority and 6 is the lowest priority.

- Objectives should be ranked by importance and prioritized
- Each objective should include a justification describing its importance to water management in the basin

# Progress Metrics

## 1. Improve water use efficiency to conserve water resources [4]

- a. Water utilities establish a baseline water loss/leak detection measure and improvement is seen over 5 years in subsequent surveys.
- b. Funding opportunities are identified and used to implement conservation strategies.

# Progress Metrics

## 2. Communicate, coordinate, and promote findings and recommendations from the River Basin Plan [1]

- a. The Saluda RBC continues to meet regularly including regular coordination meetings with other RBCs.
- b. The State has approved funding for river basin planning activities.
- c. The River Basin Plan is referenced during complementary planning processes such as resilience planning, watershed-based planning, economic development planning, and education program planning. [KW: And WaterSC Recommendations?]



# Progress Metrics

## 3. Improve technical understanding of water resources management issues [3]

- a. Impacts of groundwater uses are assessed in future planning phases.
- b. Future modeling efforts consider **future uncertainties** and county-collection flow data.
- c. Water quality issues and concerns in the basin are identified and a strategy to study approaches to address them is developed.

# Progress Metrics

## 3. Improve technical understanding of water resources management issues [3]

- d. USGS streamflow gages in the basin are maintained and increased, if SCDES recommends as such.
- e. All data necessary to support implementation actions and future areas of study is accessible and made available to the RBC and public.
- f. The financial impacts of sedimentation on reservoirs and water resources are identified. Results are communicated to local governments.

# Progress Metrics

## 4. Protect water resources [5]

- a. The primary sources of sediment loading to reservoirs are identified.
- b. Measures are put in place by local governments to prevent sediment loading to reservoirs.
- c. The Saluda RBC has communicated with Saluda Hydro operator regarding the hydrologic impairment (4C) below Saluda Lake.

# Progress Metrics

## 5. Improve drought management [6]

- a. One hundred percent of public water supplier's drought management plans are updated within the last 5 years and submitted to the SCO for review.

# Progress Metrics

## 6. Promote engagement in the water planning process [2]

- a. The RBCs continue beyond 2025 with a diverse, active and representative membership with 90 percent of seats filled.
- b. Coordination occurs with groups that have existing education and outreach efforts focused on water planning.



# Review of RBC Comments and Edits to the Draft River Basin Plan

# Comment Log

- >450 comments
- Spreadsheet sent to RBC 2/17
- **FOR TODAY:** 10 comments that represent questions/concerns from multiple people, in multiple chapters, and warrant group discussion:



Original Row	Reviewer	Chapter	Page	Relevant Text	Comment	Comment Response																														
112	Katherine Amidon	2	23	The North, Middle, and South Saluda tributaries, as well as several mountain lakes in the basin, are stocked with a mix of rainbow, brook, and brown trout, among other popular recreational fish such as striped bass (SCDNR)	Just fish? Other species? Plants?	This particular assessment/paragraph is focused on fish. Other species are addressed in the following paragraph and table.																														
137	Josie Newton	2	N/A	General in Chapter 2 (Basin Description)	There are a few times in Chapter 2 where "current" or "at the time of this document" are used (I noted this on page 2-16, and once before in Ch.2 as well). I think we need to be sure to updated this language as needed before the document is published or adjust the language to "as of DATE," instead.	One of these references is accompanied by the year (as of 2024). Others were checked to be sure there is a reference timeframe in the text. On page 2-12, text was changed to "the publication of this document," and the date of the report cover should provide the timestamp.																														
172	KC Price	3	14	In 2017, SCDHEC received a petition from South Carolina Rivers Forever (SCRF) to designate the 14-mile section of the Saluda River downstream of the Saluda Lake Dam to the headwaters of Piedmont Lake as a hydrologically impaired waterbody under Category 4C of the South Carolina 2018 Integrated Report. Saluda Lake Dam is used for hydropower on a modified peaking operation schedule. In RBC meeting discussions, several RBC members commented that the frequency and severity of low flows at the Saluda River near the Greenville gage have increased in recent years. It was also noted by RBC members that the Saluda River Yacht Club and Anderson County Parks Department have both observed increasing impacts on tubing business and other recreational uses.	After reading the background information on this, I think there needs to be a discussion before we make some of these statements.	We can discuss with the RBC. What statements are in question?																														
173	Rebecca Wade	3	14	Other surface water-related concerns have been raised by the RBC members during the planning process. Some of the concerns regarding surface water resources identified by one or more RBC members at the first, and subsequent meetings, included: -Rapid population growth... -Releases from non-FERC hydropower facilities... -Droughts of increasing severity -Loss of riparian buffers -Changing climate conditions -As discussed in Chapter 5, current water law allows water usage rates that likely exceed actual current or future need ("Fully Permitted and Registered" planning scenario), but could result in significant water shortages if water is withdrawn at allowable rates during periods of hydrologic stress.	I would like it to be considered that several RBC members have concerns regarding the permits through the current surface water withdrawal act. Currently, entities are permitted in some circumstances to all of the water available and in high demand/drought scenarios and will have significant shortages if they use all of the water they are permitted to use. I understand that RBC members were encouraged to look past this because our permittees do not currently and claim they would not use all of their permit, but that is still a major concern for some that they are legally entitled to that much of the water resource.	Added to list, with references to Section 5. "As discussed in Chapter 5, current water law allows water usage rates that likely exceed actual current or future need ("Fully Permitted and Registered" planning scenario), but could result in significant water shortages if water is withdrawn at allowable rates during periods of hydrologic stress."																														
186	Kaleigh Sims/ReWa	3	22	General in Chapter 3 (Water Resources of the Basin)	Is there a conclusion to this chapter?	The chapter follows the Water Planning Framework outline, and is intended to be informational across a wide range of topics. As such, no concise conclusion is provided, but the chapter is summarized more briefly in the Executive Summary.																														
226	Katherine Amidon	4	6	<table border="1"> <thead> <tr> <th>Water Use Category</th> <th>State Variable</th> <th>State Variable Data Source</th> <th>Modeling Demand Scenario</th> <th>High Demand Scenario</th> </tr> </thead> <tbody> <tr> <td>Public Supply</td> <td>Population</td> <td>South Carolina Office of Reclamation and Flood Affairs (SCORFA)</td> <td>U.S. Census Bureau projections to 2050, assumed constant growth or increase (constant) or population distribution projection (a negative)</td> <td>Project using statewide or statewide growth rates, membership 0%</td> </tr> <tr> <td>Manufacturing</td> <td>Economic production</td> <td>U.S. Bureau of Economic Analysis (GDP)</td> <td>Manufacturing subsector growth with the minimum adjusted to 0%</td> <td>Manufacturing subsector growth with the minimum adjusted to 2.5%</td> </tr> <tr> <td>Electricity</td> <td>N/A</td> <td>N/A</td> <td>Electricity subsector growth with the minimum adjusted to 0%</td> <td>Electricity subsector growth with the minimum adjusted to 2.5%</td> </tr> <tr> <td>Agriculture</td> <td>Unchanged average</td> <td>Brown et al. 2010 Cass-Danabas et al. 2019</td> <td>Increase with an annual percentage growth rate of 0.5%</td> <td>Increase with an annual percentage growth rate of 0.5%</td> </tr> <tr> <td>Land Use</td> <td>N/A</td> <td>N/A</td> <td>Assumed constant</td> <td>Assumed constant</td> </tr> </tbody> </table>	Water Use Category	State Variable	State Variable Data Source	Modeling Demand Scenario	High Demand Scenario	Public Supply	Population	South Carolina Office of Reclamation and Flood Affairs (SCORFA)	U.S. Census Bureau projections to 2050, assumed constant growth or increase (constant) or population distribution projection (a negative)	Project using statewide or statewide growth rates, membership 0%	Manufacturing	Economic production	U.S. Bureau of Economic Analysis (GDP)	Manufacturing subsector growth with the minimum adjusted to 0%	Manufacturing subsector growth with the minimum adjusted to 2.5%	Electricity	N/A	N/A	Electricity subsector growth with the minimum adjusted to 0%	Electricity subsector growth with the minimum adjusted to 2.5%	Agriculture	Unchanged average	Brown et al. 2010 Cass-Danabas et al. 2019	Increase with an annual percentage growth rate of 0.5%	Increase with an annual percentage growth rate of 0.5%	Land Use	N/A	N/A	Assumed constant	Assumed constant	According to table 4.4 this is assumed constant like mining and projections were not developed	Text revised to indicate that while projections were developed for all use categories, only three use categories had projected increases in demands. The others (mining, golf course, thermoelectric) were projected to remain stable at either the high end of their recent historic use (High Demand Scenario) or the median/moderate end of their historic recent use (Moderate Demand Scenario).
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330	KC Price	5	3	Performance measures were developed as a means for comparing water resource impacts (negative and positive) of each scenario. A performance measure is a quantitative measure of change in a user-defined condition from an established baseline, which is used to assess the performance of a proposed water management strategy or combination of strategies.	Are the biological measures truly quantitative?	Yes, changes in quantitative biological outcomes are estimated based on the changes to the hydrologic statistics.																														
338	Melanie Ruhlman	5	6	Of the 14 biological response metrics identified in Bower et al. (2022), the following two biological response metrics were used in the Saluda River basin because of the relevance and strong connection to hydrologic statistics that could be readily extracted from the SWAM model (descriptions from The Nature Conservancy et al. 2024): -Species richness: number of fish species found at a given site -Brood hiders: proportional representation of fish individuals in the brood hiding breeding strategy, in which	While a high species richness might suggest a healthy ecosystem, it doesn't differentiate between pollution-tolerant and sensitive species, which could lead to misleading results in polluted environments where only tolerant species thrive. A high species richness could still indicate poor water quality if the dominant species are pollution-tolerant.	The purpose of this analysis was to identify risks to species related specifically to flow. While it is acknowledged that there may be other threats, the conclusions drawn here are specifically limited to flow causation. Added a statement that results should not be extrapolated to suggest resilience or vulnerability to other types of risks, such as water quality degradation.																														
395	Rebecca Wade	5	34	5.4 Safe Yield of Reservoirs	Melanie made a brief comment during our October meeting about Safe Yield only being discussed within the context of reservoirs. I was wondering, and this might be more general feedback an area to discuss openly with the RBC, but should safe yield be looked at on rivers and streams as well? Should this have been factored into the model or should we maybe propose in one of our recommendations that this is an area for	The models can be used to evaluate safe yield in rivers, though this was not an explicit mandate of the planning framework. SCDES does compute safe yield at withdrawal locations during permitting.																														
437	Katherine Amidon	8	5	Under the Planning Framework, the RBC will support drought response, collect drought information, and coordinate drought response activities. With support from the SCO and SCDES, the RBC will: -Collect and evaluate local hydrologic information for drought assessment	How can we say the RBC will do this? With what budget and what authority and by what means?	The statement is couched with "with support from the SCO and SCDES ...". Most RBCs are suggesting continued funding for RBC activity.																														

# Chapter 2, Pg 23 (Original Line 112): Katherine Amidon

## Text

The North, Middle, and South Saluda tributaries, as well as several mountain lakes in the basin, are stocked with a mix of rainbow, brook, and brown trout , among other popular recreational fish such as striped bass (SCDNR 2023d).

## Comment

Just fish? Other species? Plants?

## Draft Response

This particular assessment/paragraph is focused on fish. Other species are addressed in the following paragraph and table.



## Chapter 2, Throughout (Original Line 137): Josie Newton

### Text

General in Chapter 2 (Basin Description)

### Comment

There are a few times in Chapter 2 where “current” or “at the time of this document” are used (I noted this on page 2-16, and once before in Ch.2 as well). I think we need to be sure to updated this language as needed before the document is published or adjust the language to “as of DATE,” instead.

### Draft Response

One of these references is accompanied by the year (as of 2024). Others were checked to be sure there is a reference timeframe in the text. On page 2-12, text was changed to "the publication of this document," and the date of the report cover should provide the timestamp.

## Chapter 3, Pg 14, Original line 172: KC Price

### Text

In 2017, SCDHEC received a petition from South Carolina Rivers Forever (SCRF) to designate the 14-mile section of the Saluda River downstream of the Saluda Lake Dam to the headwaters of Piedmont Lake as a hydrologically impaired waterbody under Category 4C of the South Carolina 2018 Integrated Report. Saluda Lake Dam is used for hydropower on a modified peaking operation schedule. In RBC meeting discussions, several RBC members commented that the frequency and severity of low flows at the Saluda River near the Greenville gage have increased in recent years. It was also noted by RBC members that the Saluda River Yacht Club and Anderson County Parks Department have both observed increasing impacts on tubing business and other recreational uses.

### Comment

After reading the background information on this, I think there needs to be a discussion before we make some of these statements.

### Draft Response

We can discuss with the RBC. What statements are in question?

## Chapter 3, Pg 14, Original Line 173: Rebecca Wade

### Text

Other surface water-related concerns have been raised by the RBC members during the planning process. Some of the concerns regarding surface water resources identified by one or more RBC members at the first, and subsequent meetings, included:

- Rapid population growth ...
- Releases from non-FERC hydropower facilities...
- Droughts of increasing severity
- Loss of riparian buffers
- Changing climate conditions
- As discussed in Chapter 5, current water law allows water usage rates that likely exceed actual current or future need (“Fully Permitted and Registered” planning scenario), but could result in significant water shortages if water is withdrawn at allowable rates during periods of hydrologic stress.

### Comment

I would like it to be considered that several RBC members have concerns regarding the permits through the current surface water withdrawal act. Currently, entities are permitted in some circumstances to all of the water available and in high demand/drought scenarios and will have significant shortages if they use all of the water they are permitted to use. I understand that RBC members were encouraged to look past this because our permittees do not currently and claim they would not use all of their permit, but that is still a major concern for some that they are legally entitled to that much of the water resource.

### Draft Response

Added to list, with references to Section 5. “As discussed in Chapter 5, current water law allows water usage rates that likely exceed actual current or future need (“Fully Permitted and Registered” planning scenario), but could result in significant water shortages if water is withdrawn at allowable rates during periods of hydrologic stress.”

## Chapter 3, Pg 21, Original Line 186: Kaleigh Sims

### Text

General in Chapter 3 (Water Resources of the Basin)

### Comment

Is there a conclusion to this chapter?

### Draft Response

The chapter follows the Water Planning Framework outline, and is intended to be informational across a wide range of topics. As such, no concise conclusion is provided, but the chapter is summarized more briefly in the Executive Summary.

# Chapter 4, Pg 6, Original Line 226: Katherine Amidon

## Text

## Comment

## Draft Response

Water Use Category	Driver Variable	Driver Variable Data Source	Moderate Demand Scenario	High Demand Scenario
Public Supply	Population	South Carolina Office of Revenue and Fiscal Affairs (SC ORFA)	SC ORFA <a href="#">County</a> projections to 2035; extend straight-line growth or assume constant population if the population projection is negative	Project using statewide or countywide growth rate, increased by 10%
Manufacturing	Economic production	Subsector growth rates from the U.S. Energy Information Agency (EIA)	Manufacturing subsector growth with the minimum adjusted to 0%	Manufacturing subsector growth with the minimum adjusted to 2.1% <sup>1</sup>
Thermoelectric	NA	NA	Assumed constant	Assumed constant
Agriculture	Irrigated acreage	National-scale studies: <ul style="list-style-type: none"> <li>▪ Brown et al. 2013</li> <li>▪ Crane-Droesch et al. 2019</li> </ul>	Assume irrigated acreage increases with an annual <a href="#">compounding?</a> growth rate of 0.65%	Assume irrigated acreage increases with an annual <a href="#">compounding?</a> growth rate of 0.73%
Golf Course	NA	NA	Assumed constant	Assumed constant
Mining	NA	NA	Assumed constant	Assumed constant

According to table 4.4 this is assumed constant (mining and golf courses and thermoelectric) and projections were not developed

Text revised to indicate that while projections were developed for all use categories, only three use categories had projected increases in demands. The others (mining, golf course, thermoelectric) were projected to remain stable at either the high end of their recent historic use (HighDemand Scenario) or the median/moderate end of their historic recent use (ModerateDemand Scenario).

## Chapter 5, Pg 3, Original Line 330: KC Price

### Text

Performance measures were developed as a means for comparing water resource impacts (negative and positive) of each scenario. A performance measure is a quantitative measure of change in a user-defined condition from an established baseline, which is used to assess the performance of a proposed water management strategy or combination of strategies

### Comment

Are the biological measures truly quantitative?

### Draft Response

Yes, changes in quantitative biological outcomes are estimated based on the changes to the hydrologic statistics.

## Chapter 5, Pg 6, Original Line 338: Melanie Ruhlman

### Text

Of the 14 biological response metrics identified in Bower et al. (2022), the following two biological response metrics were used in the Saluda River basin because of the relevance and strong connection to hydrologic statistics that could be readily extracted from the SWAM model (descriptions from The Nature Conservancy et al. 2024):

-**Species richness:** number of fish species found at a given site

-**Brood hiders:** proportional representation of fish individuals in the brood hiding breeding strategy, in which they hide their eggs but do not give parental care after.

### Comment

While a high species richness might suggest a healthy ecosystem, it doesn't differentiate between pollution-tolerant and sensitive species, which could lead to misleading results in polluted environments where only tolerant species thrive. A high species richness could still indicate poor water quality if the dominant species are pollution-tolerant.

### Draft Response

The purpose of this analysis was to identify risks to species related specifically to flow. While it is acknowledged that there may be other threats, the conclusions drawn here are specifically limited to flow causation. Added a statement that results should not be extrapolated to suggest resilience or vulnerability to other types of risks, such as water quality degradation.

## Chapter 5, Pg34, Original Line 395: Rebecca Wade

### Text

#### 5.4 Safe Yield of Reservoirs

### Comment

Melanie made a brief comment during our October meeting about Safe Yield only being discussed within the context of reservoirs. I was wondering, and this might be more general feedback/an area to discuss openly with the RBC, but should safe yield be looked at on rivers and streams as well? Should this have been factored into the model or should we maybe propose in one of our recommendations that this is an area for study during future phases?

### Draft Response

The models can be used to evaluate safe yield in rivers, though this was not an explicit mandate of the planning framework. SCDES does compute safe yield at withdrawal locations during permitting.



## Chapter 8, Pg 5, Original Line 437: Katherine Amidon

### Text

Under the Planning Framework, the RBC will support drought response, collect drought information, and coordinate drought response activities. With support from the SCO and SCDES, the RBC will:

-Collect and evaluate local hydrologic information for drought assessment

### Comment

How can we say the RBC will do this? With what budget and what authority and by what means?

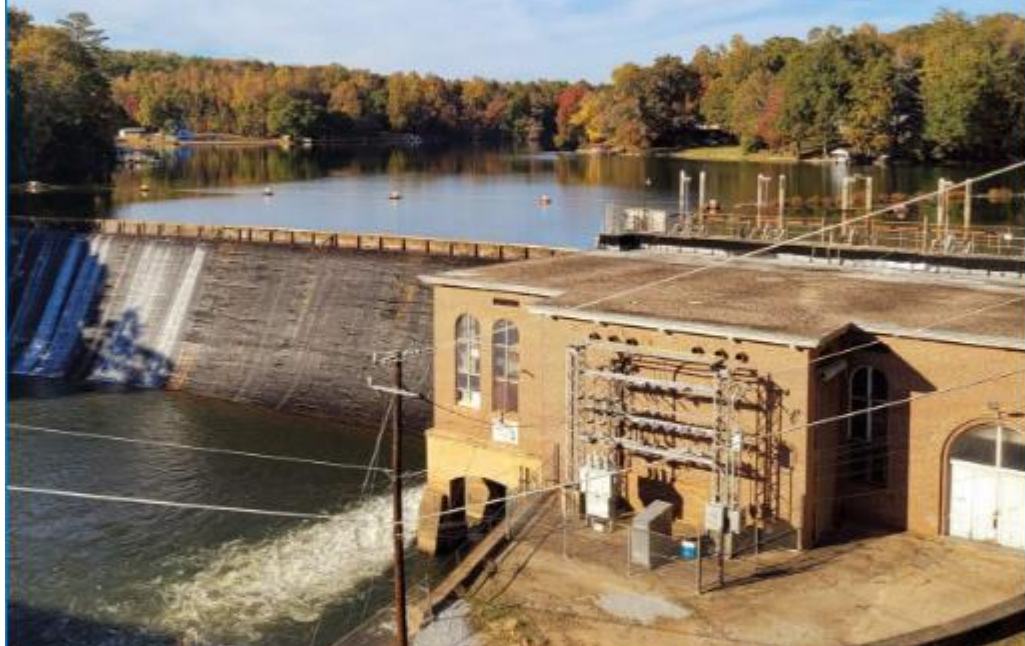
### Draft Response

The statement is couched with “With support from the SCO and SCDES ...”. Most RBCs are suggesting continued funding for RBC activity.



# Review of the Draft Executive Summary

# EXECUTIVE SUMMARY



## SALUDA RIVER BASIN PLAN 2025



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<b>ES-2 Overview of the Planning Process</b>	<b>8</b>
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<b>ES-4 Water Availability: Supply and Demand</b>	<b>12</b>
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<i>Groundwater Summary</i>	
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# Possible 2-page Summary (Broad/Upper Savannah)



## Broad River Basin Plan SUMMARY SHEET

### River Basin Planning Process

The Broad River Basin Plan is the second of eight river basin plans under development for South Carolina. Once completed, the eight basin plans will converge into an updated South Carolina State Water Plan. The Broad River Basin Plan includes data, analysis, and water management strategies to guide water resource development in the basin for a planning horizon of 50 years. It was developed by the Broad River Basin Council (RBC), a group of volunteer stakeholders representing the 8 water interest categories shown below.



**Composition of the Broad River Basin Council.** Numbers in parentheses indicate RBC member representation at the time the plan was developed.

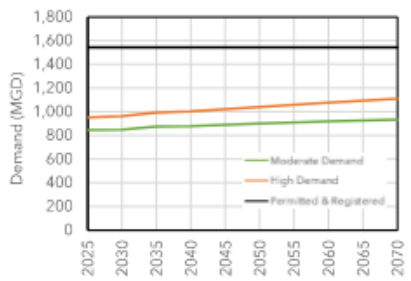
### Current and Future Water Use

Current water use in the Broad River Basin is approximately 809 million gallons per day (MGD). Nearly all the water used in the basin is withdrawn from surface water and less than 0.1 percent comes from groundwater. Only about 52 percent of the currently permitted and registered amount of surface water is used. Most of the surface water used in the basin is for thermoelectric energy and public water supply purposes, as shown in the following:

- Thermoelectric\*, 711 MGD (87.9%)
- Public water supply, 93.5 MGD (11.5%)
- Manufacturing, 3.3 MGD, (0.4%)
- Golf course irrigation, 1.1 MGD (0.1%)
- Agriculture, 0.3 MGD (0.04%)
- Mining, 0.1 MGD (0.01%)

\*Note: Most of the water withdrawn for thermoelectric cooling is returned to the river or lake after use.

To identify whether surface water supplies are likely to meet demands up to 50 years in the future, the Broad RBC investigated two planning scenarios that covered a range of surface water demand projections: (1) a *Moderate Demand Scenario*, which assumed normal weather conditions (average irrigation) and moderate growth projections, and (2) a *High Demand Scenario* which assumed a hot dry climate (high irrigation) and high population and economic growth. The *High Demand Scenario* is considered a conservative estimate of future demand and was used as the basis for selecting water management strategies. The *High Demand Scenario* projections for year 2070 account for 72 percent of the currently permitted and registered amount of surface water in the basin. The *Moderate Demand* and *High Demand Scenario* projections are shown below, compared to the current permitted and registered amount:



**Water Demand Projections in the Broad River Basin**

### Key Findings

The Broad RBC used a surface water quantity model to evaluate whether existing surface water supplies were sufficient to meet projected water demands up through 2070. Some of the most significant findings include:

## SUMMARY SHEET

## BROAD RIVER BASIN PLAN



- Surface water resources of the Broad River basin are generally sufficient to meet current water needs.
- Some public suppliers and golf course irrigators may have insufficient supply by 2070 in the *Moderate* and *High Demand Scenarios*.
- Most of the potential public supply shortages seen in the *Moderate* and *High Demand Scenarios* can likely be avoided by optimizing the operation of existing water supply reservoirs.
- Cherokee County Board of Public Works' (BPW) existing surface water supply sources may not be sufficient to meet near-term demands in the *High Demand Scenario*.
- Current and future projected water use generally results in a relatively low risk to aquatic ecology. However, the *High Demand Scenario* projections for year 2070 could result in reductions to mean daily flow at some locations and reduce fish diversity in certain streams.

The key findings are based on modeling that used historical hydrology and does not consider the potential for droughts or low flows that may be longer or more severe than those of the past 90 years. Future phases of planning may evaluate future climate risks.

### Recommendations

The RBC developed recommendations in three categories: technical, regulatory/legislative/policy, and planning process improvements. Some of the key recommendations are summarized below.

#### Technical Recommendations

- To eliminate future shortages, Cherokee County BPW should consider options to augment existing supplies including optimizing/increasing water from Gaston Shoals Reservoir, building a new water intake on the Broad River, and increasing storage by raising the dam at Lake Whelchel. Developing an existing quarry or building another reservoir are long-term options to increase water storage.
- Public water utilities should review and update their Drought Management Plans and coordinate responses and messaging with neighboring utilities.
- The financial impacts of reservoir sedimentation, including loss of storage and higher treatment costs should be identified.
- The levels at which low flows may lower the assimilative capacity of rivers and streams should be identified.
- Water quality throughout the basin needs to be further investigated, including the potential impact of land use changes on water quality.

#### Regulatory, Legislative, and Policy Recommendations

- Reasonable use criteria should be applied equally to surface water and groundwater withdrawal permits.
- Laws that allow for regulation of water use need to be enforceable. The current law, which grandfathers in most water users, can be improved to support effective water resource management.
- Water law and regulations should not distinguish between registrations and permits. All users withdrawing above the identified threshold should be required to apply for a water withdrawal permit.
- The water withdrawal permitting process should specifically assess the permit application's alignment with the current River Basin Plan, particularly regarding proposed withdrawals, returns, conservation, and drought response.

#### Planning Process Recommendations

- Future climate projections should be considered when evaluating surface water availability.
- SCDNR should organize statewide meetings of the RBCs with the Agriculture and Natural Resources Committee of the State Senate and Agriculture, Natural Resources, and Environmental Affairs Committee of the State House to communicate the value of water planning, highlight progress, and exchange ideas.

#### Call to Action

The Broad RBC developed an implementation plan, which focuses on key goals and priorities identified during the planning process. It identifies 5 short-term objectives for the next 5 years: improving water efficiency and conservation, optimizing and augmenting existing water sources, improving drought management, communicating the River Basin Plan's findings, and improving the technical understanding of water resources issues in the basin.

Implementing these near-term goals and continuing with longer-term management of the basin will require concerted efforts from the RBC, other stakeholders, and the state legislature. The following actions are ways that can help put the Plan to work:

- The South Carolina Legislature should continue to fund water planning activities, including river basin planning.
- In addition to continued water planning, near-term funding and application assistance must be available to assist water users in pursuing recommended management strategies.
- The RBC should continue to meet regularly to maintain momentum and work through implementation issues.



# Public Meeting Discussion

John Boyer and Ashley Reid

Topic	Speaker	Time
1. Welcome and Introductions	Ken Tuck, RBC Chair	6:00 - 6:10
1. Overview of the Planning Process	Scott Harder, SCDNR and Jeff Lineberger, RBC Member	6:10 - 6:20
1. Draft Broad River Basin Plan Highlights		6:20 - 7:20
a. Vision and Goals	Jeff Lineberger, RBC Member	
a. Water Demands	John Boyer, RBC Facilitator	
a. Surface Water Availability		
a. Streamflow-Ecology Relationships		
a. Water Management Strategies	Frank Eskridge, RBC Member	
a. Plan Recommendations	Ken Tuck, RBC Chair	
a. Issues and Challenges		
a. Implementation Plan		
1. Public Comment Period and Questions and Answers	Dr. Jeff Allen, Clemson University	7:20 - 8:00

# Example Public Meeting Agenda (Broad RBC)



# Upcoming Meeting Schedule

# Saluda RBC Planning Process Schedule for Completion

2025

Jan	Finalize Implementation Plan
Feb	Review and Discuss Draft Plan and Executive Summary
Mar	Final Discussions and possible vote on Draft Plan
Apr	1 <sup>st</sup> Public meeting
May	Address Draft Plan Comments and Finalize Plan
Jun	2 <sup>nd</sup> Public meeting (tentative)



# Decision Making – River Basin Plan Approval Process

## Step 1

- Testing for consensus of **Draft Plan**

Five Point Rating Scale

1

Full Endorsement

2

Endorsement, but with minor points of contention

3

Endorsement, but with major points of contention

4

Stand aside with major reservations (requires changes)

5

Withdrawal (Member leaves)

## Step 2

- For the **Final Plan**, each RBC Member will indicate their **support** or **disagreement**
- By supporting the **Final Plan**, each member acknowledges their:
  - Concurrence with the Plan
  - Commitment to support implementation of the Plan

**Extra**

**The RBC encourages state and local governments to develop/review/update/adopt and enforce laws, regulations, policies, and/or ordinances that improve the management of stormwater runoff, encourage infiltration, minimize streambank erosion, reduce sedimentation, and protect water resources. The following are RBC-recommended best management practices:**

- Riparian buffer protection
- Open space protection
- Strengthening stormwater regulations to minimize stormwater runoff volume from construction sites
- Incentivizing green infrastructure in development designs
- Allocating local funding sources for land conservation

**Approved by RBC consensus**

- Regulation for open space protection **(8 of 9)**
  - **Definition: Open space includes all unbuilt areas, whether publicly or privately owned, protected or unprotected. Open space lands include forests and grasslands, farms and ranches, streams and rivers, and parks.**

*We will add the definition of open space (per USFS\*) in the narrative to the recommendation, for RBC consideration as they review the draft chapter.*

\* <https://www.fs.usda.gov/science-technology/loss-of-open-space#:~:text=Open%20space%20includes%20all%20unbuilt,and%20offer%20opportunities%20for%20recreation>

# Majority approved Recommendations Pertaining to Surface Water Law and Regulation

- **The South Carolina Surface Water Withdrawal, Permitting, Use, and Reporting Act should allow for reasonable use criteria to be applied to all new surface water withdrawals, like those that currently exist for groundwater withdrawals.**
- **Improve the current laws that allow for regulation of water use so that they are enforceable and effective. The current water law, which grandfathers most water users, needs to be improved to support effective management of the state's water resources.**

# Save Our Saluda Proposed Recommendations

- **Require permits statewide for all existing and new water withdrawals over 3 MGM, including those before 2011 and all registered users. All users must be evaluated for reasonableness and must meet minimum instream flow (MIF) requirements.** [9 for, 9 against, 2 abstain. We will add these results to the last paragraph of the Chapter which presented results of previous vote on permits vs. registrations rec]
- **SCDNR/SCDES to review the science behind minimum instream flow (MIF) standards to ensure they are based on best available science to adequately protect designated uses and recognize regional differences.** [approved by consensus]
- **Review the implementing regulations [ID it] to ensure consistency with the law [ID it], including a review of the existing definition of “safe yield” (SY) in the implementing regulations. Redefine how SY is determined to be consistent with the law and protective of minimum instream flow requirements that safeguard the integrity and designated uses of state waters.** [approved by consensus]

# Permits and Registrations (from Dec Meeting)

- **Water law and implementing regulations should not distinguish between registrations and permits.** All water users that withdraw above the identified threshold should be required to apply for a water withdrawal permit. Current law allows for agricultural surface water users and all groundwater users withdrawing water outside of CUAs to register their water use rather than apply for permits.

**8 For**

**8 Against**

**3 abstain**